IN THE CLAIMS

1. A compound <u>of Formula I</u> having high affinity for a dopamine transporter having a formula selected from the group consisting of:

Formula I

$$X \xrightarrow{\parallel} B - (CH_2)_m - N \xrightarrow{N} M \xrightarrow{\parallel} Z_1$$

Formula II

$$\begin{array}{c|c} X & & & & & \\ \hline X & & & & & \\ \hline Y & & & & \\ \end{array}$$

Formula III

$$\begin{array}{c|c} X & \hline \\ \hline \\ Y & \hline \\ \hline \end{array}$$

Formula IV

$$X - HN$$
 $Y - HN$
 $Y -$

B3401639.1 - 2 -

wherein:

B is $-O_{-}$, $-N(H)_{-}$, $-C(=O)N(H)_{-}$, or $-N(H)C(=O)_{-}$;

[[n]] \underline{m} is an integer of 1 to 6; \underline{X} , \underline{Y} , \underline{Z}_1 and \underline{Z}_2 can be the same or different and are hydrogen, halo, haloalkyl, alkyl, aryl, (C_1-C_6) alkoxy, N-alkyl, (C_2-C_6) acyloxy, N-alkylene, -SH, -SR, wherein R is from the same group as R_1 and R_2 and can be the same or different than R_1 and R_2 , amino, nitro, eyano, hydroxy, $C(=O)OR_6$, $C(=O)NR_5R_6$, NR_3R_2 or $S(=O)_kR_1$ wherein $_k$ is 1 or 2, and R_1 to R_6 are independently hydrogen or (C_1-6) alkyl;

X is hydrogen, halo, haloalkyl, alkyl, aryl, C_1 - C_6 alkoxy, N-alkyl, C_2 - C_6 acyloxy, or N-alkylene;

Y is hydrogen, halo, haloalkyl, alkyl, aryl, C_1 - C_6 alkoxy, N-alkyl, C_2 - C_6 acyloxy, or N-alkylene;

 Z_1 is hydrogen, halo, haloalkyl, alkyl, aryl, C_1 - C_6 alkoxy, N-alkyl, C_2 - C_6 acyloxy, or N-alkylene;

 R_1 , and R_2 can be the same or different and are hydrogen, (C_1-C_6) alkyl, hydroxyalkyl or mercaptoalkyl, $C(=O)OR_1$, cyano, (C_1-C_6) alkenyl, (C_2-C_6) alkynyl, or 1,2,4oxadiazol 5-yl optionally substituted at the 3-position by Z, wherein any (C_1-C_6) alky, (C_1-C_6) alkenyl or (C_2-C_6) alkynyl can optionally be substituted by 1, 2 or 3 Z; Z_4 is (C_1-C_6) alkyl or phenyl, optionally substituted by 1, 2 or 3 Z_1

B3401639.1 - 3 -

R₇ can be hydrogen, O or phenyl

R₈ can be hydrogen, phenyl, halophenyl, nitrophenyl, pyridyl, piperonyl or sulfoxonitrophenyl

W is O or S;

T is amino or C₁-C₆ aminoalkyl

A is N or C; and

T is C₁-C₆ alkyl or sulfonyl. and

V is alkyl (C₀-C₆), alkenyl, alkynyl, haloaryl, alkyl phenol, alkyl halophenyl, and R₁ or

R2 as indicated above and

\$\phi\$ is phenyl, naphthyl, thienyl or pyridinyl.

Claims 2-13 (canceled)

- 14. (new) The compound of claim 1, wherein X is halo.
- 15. (new) The compound of claim 1, wherein X is para-F.
- 16. (new) The compound of claim 1, wherein Y is halo.
- 17. **(new)** The compound of claim 1, wherein Y is *para-F*.
- 18. (new) The compound of claim 1, wherein B is O.
- 19. (new) The compound of claim 1, wherein m is 4.
- 20. (new) The compound of claim 1, wherein W is O.
- 21. (new) The compound of claim 1, wherein T is C_1 - C_6 alkyl.
- 22. (new) The compound of claim 1, wherein T is -CH₂-.
- 23. (new) The compound of claim 1, wherein T is sulfonyl.
- 24. (new) The compound of claim 1, wherein A is C.
- 25. (new) The compound of claim 1, wherein Z_1 is halo.
- 26. (new) The compound of claim 1, wherein Z_1 is para-F.

B3401639.1 - 4 -

27. (new) The compound of claim 1, wherein the compound is selected from the group

B3401639.1 - 5 -